Beyond the ‘Perfect Order’
Index: Obtaining a True Measure of Customer Value

Manufacturers and retailers need to rethink order execution to create continuous value and resolve customers’ most pressing needs.
Executive Summary

The so-called “perfect order” index (POI), a metric of how exactly a company fulfills a customer’s order, has always been elusive. Given growing customer expectations, shrinking product lifecycles and increased supply chain velocity, the concept deserves another look. To update the POI metric and make it useful in the context of today’s dynamic demand-driven environment, manufacturers and retailers need to rethink their response to customers’ real needs rather than go on assumptions; reinvent their fulfillment operations from end to end; and rewire their performance measurement using better data.

This white paper, which revisits the concept of perfect order within the context of supply chain execution, is the third and final installment in our three-part Adaptive Supply Chain Series. Part 1 of our series focuses on supply chain strategy, revealing how companies need to adapt their strategies to simultaneously accelerate revenue growth and productivity while containing costs. Part 2 discusses how manufacturers and retailers should use demand and supply planning technology and techniques to arrive at an optimal inventory plan.
Beyond the 'Perfect Order' Index: Obtaining a True Measure of Customer Value
The Perfect Order, Revisited

Manufacturers and retailers have long pursued the Holy Grail of consistently achieving the “perfect order.” If a high percentage of your orders are “perfect,” the theory goes, you will have happy customers who will repay you by ordering more. In its simplest (and most traditional) incarnation, a perfect order meets the elements of a product shipped in full, on time, undamaged and with the right documentation (including invoice). But many believe this age-old definition of perfect order is lacking, particularly in its inability to address whether the order actually met the customer’s needs.

Over time, many practitioners and gurus have contributed to the concept of perfect order. R “Ray” Wang, CEO at Constellation Research, advanced the concept several years ago by listing 20 criteria an order should meet before it could be considered “perfect.” Not surprisingly, those criteria included elements pertaining to quality and consistency.

Given that “perfect order” now means something different to just about everyone, we revisited the concept to see where it retains value and where companies need to adjust their thinking to align their customer value metrics with today’s supply chain challenges.

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Definitive statistics are hard to come by, but our conversations with inventory managers reveal that for most companies, not even 50% of orders approach perfection via the traditional definition. So, why is it so difficult to achieve? And, even more so, why do manufacturers and retailers even try? Attempting to achieve perfect order for every customer would require businesses to tie up an inappropriate amount of inventory and working capital. The task at hand should be more geared toward leveraging current technologies, such as mobile, social and advanced analytics, to deliver more perfect orders in a cost-effective manner that meet true customer needs.

Manufacturers and retailers need to consider the following variables in developing their own version of the perfect order:

- **Market context.** Businesses need to take into account the current conditions and realities of their vertical industry segment. For example, lead times and customer needs vary widely, even within the same broad industry. A maker of telephone poles, for example, will not be under the same pressing time requirements as a supplier to the electronics industry, although both are manufacturers.

- **Demand and trend data.** Using the trending patterns that can be gathered via social, mobile and analytics data and their influence on the destination context (when, what, how much), companies need to determine the necessary planning or configuration requirements.

- **Infrastructure and capabilities.** Can the manufacturer and its suppliers produce the products the market desires and deliver them quickly and with enough scale to meet new market and segment demands? For retailers, is the infrastruc-
ture sufficient to handle the rigors of omnichannel delivery with adequate consistency and scale?

- **New metrics.** The new view of perfect order may require the organization to challenge its thinking on metrics and key performance indicators (KPIs). For example, metrics should focus on the throughput and performance of the entire system as opposed to departmental output. Individual groups will still need their own performance measures, but these metrics need to roll up into a view of how they achieve organizational goals. Businesses should recast metrics away from internally focused measures and work toward holding the end consumer’s viewpoint as supreme. (See sidebar below for an example of how this might work.)

**Rethink, Reinvent, Rewire**

In light of growing customer expectations, shrinking product lifecycles and the need for increased supply chain velocity, the perfect order needs to be redefined. To update the perfect order metric and make it useful in the context of today’s dynamic demand-driven environment, manufacturers and retailers need to:

- **Rethink their response to the customer’s real needs,** rather than relying on assumptions. For instance, there may be elements of perfect order that are irrelevant to customers, and businesses should not apply resources to meeting those elements. An example is Amazon revolutionizing retail by offering standard two-day and even same-day delivery, increasing customer expectations in every retail sector across the board. But businesses should not assume that customers need or even value delivery speed. The quality, flexibility or even appearance of goods may be more important, especially in the B2B context. To understand customer expectations, business should ask them what is most important; transactional surveys are a real-time way to find out if your organization is meeting expectations and make changes if not.

  In any case, businesses should not set themselves up for failure by devoting too many resources (such as high inventory levels) to achieving a delivery metric that customers don’t value or that doesn’t make sense in their market segment.

**Quick Take**

**Transitioning to Customer-Centric Metrics**

Traditionally, it was enough for a car manufacturer to measure its performance on orders delivered to its dealerships. But this is no longer enough in today’s social and mobile world. Now, car manufacturers need to be much more concerned with customer satisfaction levels.

For instance, consider a car manufacturer that monitors activity on its consumer-facing Web sites. It might discover that the demand for cars with big-block engines has diminished due to increasing gas prices. In this changed environment, it would be meaningless to strive for perfect order delivery on the models that have fallen out of favor. It does no good for the manufacturer to produce or deliver cars – no matter how efficiently and completely – that do not meet market needs.

Instead, the car manufacturer must adjust its forecasts and production schedules to meet consumer demand for its more fuel-efficient models, as seen via Web inquiries. Accordingly, the dealer needs to adjust its OEM shipments to align with consumer demand. It is only when the models being produced and the orders from the dealership are in sync with consumer feedback that the concept of perfect order becomes meaningful.
Segment analysis studies can help companies properly tailor their product/service offering to customer needs.

- **Reinvent fulfillment operations, end to end.** Although it’s not an easy undertaking, businesses need to capture accurate demand signals to gauge true demand, as well as optimize warehouse and logistics operations. Many third-party logistics providers are well aware of the need to work with customers to develop KPIs that align with customers’ definition of perfect order.

- **Rewire performance measurement using better data.** Manufacturers and retailers can tap a wealth of tools – especially social, mobile and analytics – to gather performance data. By leveraging KPI data to feed business intelligence or analytics software, they can diagnose the cause of supply chain problems or look for patterns that present improvement opportunities. Root cause analysis and other analytics techniques can reveal hidden links between upstream and downstream problems. The goal is to isolate, in as granular a way as possible, the causes of poor performance.

If defined properly, customer segments can drive optimization of all aspects of the supply chain, moving the company closer to perfect order fulfillment.

Each of the above actions must be made in a holistic manner, in accordance with the theory of constraints (TOC) management principle. Doing so ensures that manufacturers and retailers do not optimize one area of the organization at the expense of the entire enterprise. The danger of localized optimization is that other parts of the supply chain are left unrefined, which under the theory of constraints jeopardizes the whole system.

For example, assume a manufacturer’s procurement department works to speed the delivery of raw materials in hopes of improving the company’s perfect order performance. This action might make it appear that procurement is surpassing its own performance goals. But if the production side of the business cannot increase its pace accordingly, the raw materials will sit in inventory, creating a bottleneck and threatening the performance of the supply chain as a whole, rather than helping to achieve perfect orders.

### The Role of Customer Segmentation in Supply Chain Orchestration

A best practice of supply chain execution is segmenting customers into meaningful categories, such as by their contribution to company profits or cost to serve. Categorizing customers helps companies better understand each type of individual or business, as well as optimize supply chain processes, since resources are dedicated according to clearly set organizational priorities.

If defined properly, customer segments can optimize all aspects of the supply chain, moving the company closer to perfect order fulfillment. Companies can begin to establish different stock fulfillment mechanisms based on promised service levels to customers.
For instance, a retailer might establish a single inventory pool with sophisticated inventory allocation rules to offer differentiated service levels for different customers and at the same time enjoy the benefits of maintaining a centralized inventory pool. The same logic can be extended to upstream supply chain activities, such as manufacturing and even procurement. It is vital to understand the needs of each customer type while also consciously selecting the best way to satisfy that need according to the policies set for the customer type. Figure 1 shows the steps involved in segmenting customers for supply chain orchestration.

Consolidating disparate order management systems goes a long way toward improving order performance and decreasing costs (see sidebar, page 8).

**Looking Ahead: Next Steps**

When evaluating how to adjust the definition of the perfect order to better meet customer expectations, businesses should start with these considerations:

- Review existing metrics and evaluate how to best measure alignment with customer needs. For most manufacturers and retailers, the biggest challenge is moving from company-centric metrics to customer-centric measures. Critical measures should tie back to consumer expectations.

- Segment customers according to meaningful criteria, such as contribution to the bottom line, rather than just by size or region.

- Use social and mobile methods to gather requirements that are most important to the business and determine the best way to deliver them.

Beyond remaking the “perfect order,” manufacturers and retailers need to reimagine order execution in ways that create continuous value and resolve customers’ ever-changing business needs.
Quick Take

Paper/Pulp Manufacturer Consolidates Disparate Systems, Improves Order and Cost Performance

We helped the paperboard operations unit of a major paper/pulp manufacturer improve its application integration and reengineer its process workflows, resulting in an expected $10.5 million in annual savings.

Tracking orders, inventory, shipments and costs in a global market across three legacy systems was an ongoing problem for this business division. This was in large part due to the division’s reliance on a mix of systems to coordinate the shipment and processing of packaging material among three mills, converting operations, distribution facilities and warehouses.

To improve these key functions, the client looked to us to reengineer business processes and provide a single integrated technology platform to support those processes.

Managing orders across this mix of systems led to ongoing inefficiencies, including:
• Higher levels of inventory than required.
• Under-utilization of certain assets.
• Subpar delivery performance.
• An overabundance of manual processes.
• A lack of common data.

We responded by using the industry-standard SCORE® (Supply Chain Operations Reliability Engagement) methodology to help the company reengineer its core supply chain business processes. By using SCORE, we increased the efficiency of scheduling machines, reduced waste and improved customer service through integration. Information from third-party applications now flows directly to enterprise applications that manage production, transportation and warehousing, thus making it far easier for employees to see, track and manage inventory and orders.

In the future, this company’s customers will benefit from a new e-commerce portal that interacts in real-time with the company’s SAP ERP suite to greatly reduce the time required to view inventory levels, order products and receive order acknowledgments.

Envisioned benefits include:
• 10% improvement in paper machine efficiency.
• 20% improvement in open stock availability through automated inventory replenishment.
• 15% reduction in inventory obsolescence.
• Improved customer delivery performance.
• Improved data availability and consistency.
• Ability for customers to view available inventory or place orders on a Web site or via EDI, reducing order entry time by 10%, automatically generating a promise date and order confirmation.

Footnotes
3 The Theory of Constraints was introduced by Eliyahu M. Goldratt in his 1984 book, The Goal. TOC postulates that all manageable systems have at least one constraint that prevents goal achievement. It advocates a focused process to identify the constraint and restructure the rest of the organization around it.
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